

## Human and Ecological Risk Division

### Ecological Risk Assessment Checklist

To facilitate preparation and HERD approval of ecological risk assessments, the following checklist has been prepared. This checklist is provided as an aid to those preparing ecological risk assessments for submittal to the Department of Toxic Substances Control Site Mitigation or Permitting Branches. This check list contains the elements of an ecological risk assessment which have been the focus of extended discussion, and sometimes disagreement, in ecological risk assessments prepared without input from regulatory agencies. Preliminary review by HERD of these elements should speed and ease review of the full ecological risk assessment submitted to HERD. The submittals of these items for preliminary review need not be more than simple tables and accompanying paragraphs on unbound sheets without covers or expensive printing.

#### Scoping Assessment

- ◇ A simple list of habitats present at or near the site or facility and the habitat classification scheme used to identify the habitats.
- ◇ A list of the potential representative species chosen for each habitat.
- ◇ A list of the contaminants of potential ecological concern (COPEC).

#### Predictive Assessment

- ◇ A list of the proposed exposure pathways for each representative species with a simple explanation and justification for exclusion of any exposure pathway.
- ◇ A final list of the contaminants of ecological concern (COEC), by media, and the criteria which caused any contaminants of potential ecological concern (COPEC) to be eliminated from the proposed list of COECs
- ◇ A list of the COECs for which bioaccumulation will be evaluated indicating the criteria which were used to identify these bioaccumulative COECs.
- ◇ A simple explanation of the methodology which will be used to assess bioaccumulation.
- ◇ A list of any bioconcentration factors (BCFs) or biomagnification factors (BMFs) with associated citation as to source. Specify the soil-to-plant BMF, plant-to-herbivore BMF and prey-to-predator BMF.
- ◇ A list of the toxicity reference values (TRVs) to be used with the associated citation as to source.
- ◇ A simple explanation of the method proposed for any cross-species extrapolation of TRVs which may be required.
- ◇ A list of any proposed uncertainty factors (UFs) for cross-species extrapolation with the associated citation as to source.
- ◇ A list of the proposed exposure parameters for each representative species with the associated citation as to source.

#### Validation Study

- ◇ A list of the bioassay protocols for any proposed bioassays with the associated protocols specified.

This checklist is meant to be used in conjunction with the DTSC guidance on ecological risk assessments contained in the documents titled *Guidance For Ecological Risk Assessment At Hazardous Waste Sites And Permitted Facilities Part A: Overview and Guidance for Ecological Risk Assessment At Hazardous Waste Sites And Permitted Facilities Part B: Scoping Assessment*. These two documents are available in Microsoft WORD format on the Division web page at <http://www.cwo.com/~herd1/herd.htm>.

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